



UNITED STATES PATENT AND TRADEMARK OFFICE

A

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/089,068	04/05/2002	Erik Dahlquist	221449US8PCT	3050

22850 7590 07/25/2005

OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C.
1940 DUKE STREET
ALEXANDRIA, VA 22314

EXAMINER

RAO, SHEELA S

ART UNIT	PAPER NUMBER
----------	--------------

2125

DATE MAILED: 07/25/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/089,068

Applicant(s)

DAHLQUIST ET AL.

Examiner

Sheela Rao

Art Unit

2125

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 April 2002.
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 41-80 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 41-80 is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
10) ☒ The drawing(s) filed on 05 April 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 4/5/05
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____

DETAILED ACTION

1. Claims 41-80 are pending and presented for examination.
2. The Preliminary Amendment filed on April 5, 2002 has been entered and considered. The amendment cancels claims 1-40 and adds claims 41-80.
3. Applicant's submission of references on form PTO-1449, filed on April 5, 2002, has been considered. A signed copy of the form is attached.

Specification

4. The specification has not been checked to the extent necessary to determine the presence of all possible minor errors. The disclosure contains numerous grammatical and idiomatic inconsistencies. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

Claim Rejections - 35 USC § 112

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claim 41 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

At lines 3 and 4 of claim 41, "the process" is stated as being involved in the controlling and delivering aspect, respectively, of the instant invention. The preamble of the instant claim sets forth two different processes, one being the "industrial process: and the other being the "at least two unit processes". It is not clear which of the processes is being referred to in the recitation of "the process" at lines 3 and 4. Appropriate correction is required.

Claim Rejections - 35 USC § 102

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

8. Claims 41-80 are rejected under 35 U.S.C. 102(b) as being anticipated by Cardner, US Patent No. 5,402,333.

Cardner teaches of a system and method for producing product property estimates from process models. In doing so, the patented reference anticipates and teaches the limitations of the instant invention. As stated at lines 18-24 of column 4, the preferred embodiment of the patented invention is a computer-based system for product property control in any manufacturing process. With regard to claims 41 and 60, the system uses "the process autopilot" for controlling the system and "product properties" are measured or computed, see column 4: ll. 60, et seq. The step of automatically diagnosing the validity of the process and modifying such is carried through and explained by the "flow data reconciliation" process of the patented reference, see column 6: ll. 30, et seq. (as per claims 43-46 and 62-64). The step of "preventing irrelevant process data from being used as an input" is taught by Cardner where inaccurate measurements are stopped from being used and rendered useless, see col. 2: ll. 2-3; col. 7: ll. 48-53. The simulation of process models and the presence of control models, as per claims 42 and 61, is depicted in Figure 1 of the reference of prior art. The steps for simulating and optimizing of the processes is taught in the "calibration" step discussion at column 10, beginning at line 40, as per instant claims 46-48 and 65-67. The product property set points or process variables as per claims 49-51 and 68-70 are shown in Figure 2 and also explained beginning at column 9, line 63. The step of observing patterns that indicate errors or malfunctions as per instant claims 52-54, 71-73 and 76 is taught at column 11, lines 25, et seq. wherein the product property comparison module is described which computes property errors. The adjustment of the model based on the results of measuring, predicting and evaluation the process models is taught in the "alignment" process as performed by the patented invention (claims 56 and 75). The mode of rebuilding or replacing the process based on the acquired data, as with claims 58, is a result that is the culmination of the sequence of steps taken in analyzing, diagnosing, simulating, and optimizing the process modules as taught in the disclosure of the prior art. With regard to instant claims 55, 74 and 59, 79-80, which specify the measurement criteria and environment of the process, Cardner uses known variables such as pressure, temperature, level and flow as measurement variables for controlling the processes. Additionally, at numerous instances, the fact that the method and system invented by Cardner is applicable to any process is stated in the disclosure. The reason for optimization of the process is stated for purposes of accuracy, reliability, quality, and maintenance as requirements, as per claims 57, 77, and 78, see col. 1: ll. 52- 68.

For the reasons stated above, the limitations of the claimed invention is taught by the prior arts of record; thereby, rendering the instant claims unpatentable.

Conclusion

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sheela Rao whose telephone number is (571) 272-3751. The examiner can normally be reached Monday - Friday from 8:30 am to 4:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Leo Picard, can be reached on (571) 272-3749. The fax number for the organization where this application or any proceeding papers is assigned is (703) 872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. It should be noted that status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should any questions arise regarding access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Sheela S. Rao
Patent Examiner
AU 2125